Notice of Allowability	Application No.	Applicant(s)	
	10/733,138	GODEFROID, ALAIN JOSEE JOSEPH	
	Examiner	Art Unit	
	Steven D. Maki	1733	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--

All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. **THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS.** This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

1. ☒ This communication is responsive to *10-31-05*.

2. ☒ The allowed claim(s) is/are *1-9*.

3. ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
   a) ☐ All b) ☐ Some* c) ☐ None of the:
      1. ☐ Certified copies of the priority documents have been received.
      2. ☐ Certified copies of the priority documents have been received in Application No. _____ .
      3. ☐ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

   * Certified copies not received: _____.

Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application.
THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.

4. ☐ A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.

5. ☒ CORRECTED DRAWINGS (as "replacement sheets") must be submitted.
   (a) ☐ including changes required by the Notice of Draftsperson's Patent Drawing Review (PTO-948) attached
      1) ☐ hereto or 2) ☐ to Paper No./Mail Date _____.
   (b) ☒ including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date _____.

   Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).

6. ☐ DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

Attachment(s)

1. ☐ Notice of References Cited (PTO-892)
2. ☐ Notice of Draftperson's Patent Drawing Review (PTO-948)
3. ☒ Information Disclosure Statements (PTO-1449 or PTO/SB/08), Paper No./Mail Date 121103
4. ☐ Examiner's Comment Regarding Requirement for Deposit of Biological Material
5. ☐ Notice of Informal Patent Application (PTO-152)
6. ☒ Interview Summary (PTO-413), Paper No./Mail Date *110805* .
7. ☒ Examiner's Amendment/Comment
8. ☒ Examiner's Statement of Reasons for Allowance
9. ☐ Other _____.

Examiner's Amendment

1) An examiner's amendment to the record appears below. Should the changes and/or additions be unacceptable to applicant, an amendment may be filed as provided by 37 CFR 1.312. To ensure consideration of such an amendment, it MUST be submitted no later than the payment of the issue fee.

In claim 1:

last line after "centerline" insert --wherein the spacing between the projections is greater than the width of the projections--

In the specification:

on page 2 line 2 (the last line of paragraph 6) after "projection." insert --The spacing between the projections is greater than the width of the projections.--

Change title to:

--Tire tread including spaced projections in base of groove--

Amend figure 1 as follows: At the top of figure 1, change both occurrences of "12" to --13--. These changes are indicated below:

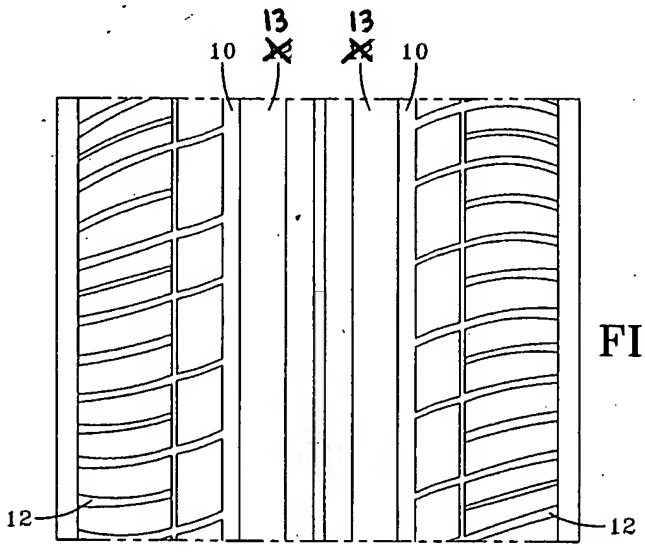

FIG-1

2) Authorization for this examiner's amendment was given in a telephone interview with Nancy Krawczyk on 11-8-05.

Reasons for Allowance

3) The following is an examiner's statement of reasons for allowance, which supplements applicant's argument's at pages 3-4 of the response filed 10-31-05:

The subject matter inserted at page 2 of the specification is reasonably conveyed by the original disclosure including the description of "spaced projections" on lines 5-6 of paragraph 6 of the original disclosure, the description of "spaced projections" in original claim 1, original figures 2-4 and the indication of projection width in original figures 5A-5B.

Projections in the base of a groove of a tire tread are known per ser as evidenced by Fukata (WO 95/18022), Heinen (US 6415835), Shesterkin (US 2268344) and Matsumoto (US 2002/0112801).

Fukata, which does not describe creating helical rotation of water, discloses projections extending from one groove wall to the opposing groove wall and orienting the projections at 90 degrees to the groove centerline. Fukata teaches that the waved bottom surface serves to impart a flow of water in the longitudinal groove with a wave motion directed radially outwardly of the tire wherein the impact of the wave motion divides the water held in the groove into small lumps. See lines 6-18 on page 7 of Fukata. Fukata fails to suggest orienting the projections at an angle of 10-50 degrees relative to the groove centerline.

Heinen discloses projections extending skewed with respect to the median plane line by an angle of 45-90 degrees (this angle being 90 degrees in the embodiment). In contrast to Fukata's teaching to form "small lumps", Heinen teaches that the projections disrupt the eddies or vortices that are present along the groove surface. See col. 4 lines 52-54. Although Heinen teaches a pitch length less than 5 mm and providing the peaks and valleys on one side of the groove 180 degrees out of phase with peaks and valleys on the other side of the groove (column 5), Heinen fails to teach projections having a pitch length measured at the groove centerline of 0.75-1.25 the projection length as measured along the groove centerline wherein the spacing between the projections is greater than the width of the projections.

Shesterkin shows projections for preventing groove cracking extending from one groove wall to the opposing groove wall at an angle with respect to the groove centerline. Shesterkin fails to teach projections having a pitch length measured at the groove centerline of 0.75-1.25 the projection length as measured along the groove centerline wherein the spacing between the projections is greater than the width of the projections. In figure 4, the illustrated pitch length is about 0.50 times the projection length.

Matsumoto, directed to suppressing air resonance, discloses a groove bottom rib 13 between one groove wall and an opposing groove wall and providing spaced projections extending from one groove wall to the bottom groove rib. See figures 3 and 5. Matsumoto teaches inclining the projections at an angle alpha of 20-70 degrees. However, Matsumoto fails to teach either the projections extending from one groove

wall to the opposing groove wall or projections having a pitch length measured at the groove centerline of 0.75-1.25 the projection length as measured along the groove centerline. In figure 5, the illustrated pitch length is about 0.60 times the projection length.

Although the prior art of record teaches projections in a groove base, the prior art of record fails to suggest providing **spaced projections** inclined at an angle of 10-50 degrees relative to the groove centerline **and** providing projections with a pitch length measured at the groove centerline of 0.75-1.25 the projection length as measured along the groove centerline wherein the spacing between the projections is greater than the width of the projections **in combination with** the remaining limitations of claim 1.

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

4) Any inquiry concerning this communication or earlier communications from the examiner should be directed to Steven D. Maki whose telephone number is (571) 272-1221. The examiner can normally be reached on Mon. - Fri. 8:30 AM - 5:00 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Thomas Dunn can be reached on (571) 272-1171. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Steven D. Maki
November 8, 2005

Steven D. Maki 11-8-05
STEVEN D. MAKI
PRIMARY EXAMINER